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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/245,292	02/05/99	SALKINI	J 5195

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EXAMINER

LEE, C

ART UNIT

PAPER NUMBER

2663

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05/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/245,292

Applicant(s)

SALKINI ET AL.

Examiner

Andrew Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-104 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-104 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-7, 12, 14, 15, 18-53, and 67-85 are rejected under 35 U.S.C. 102(e) as being anticipated by Fletcher et al U.S. Statutory Invention Registration H1,921.

Re Claims 1, 27, 47, Fletcher et al teaches (see fig 4), the telecommunications system comprising MSC (a switching center) coupled to various of radio interface 112 operating in various air protocols, i.e., TDMA, CDMA, or FDMA (see col. 29, lines 38-67); further teaches the call processor assembly 200 (processor) which controls the operations of the Interfaces through various agents within the MSC to facilitate the adaptability between access technologies or standards (see col. 20, lines 13-24).

Re Claims 2-6, 48-52, further teaches the telecommunication system to employ various protocols such as, IS-41, IS-634, and GSM (first/second intra/inter systems)

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wherein the GSM protocol is anticipated to include known version of the GSM standard, such as, GSM A (series 4 and 8), IS-651 and J-STD, IS-652 and GSM 09.02 standards (See col. 18 lines 65 + & also see col. 30, lines 11-22).

Re Claims 7, 53, see fig 1, the telecommunication system is link with the PSTN 106 through link 116 wherein ISDN PRI+ and proprietary protocols are both supports by the circuit providers of 106.

Re Claim 12, see fig 2, wherein the call processor determines the protocol based on the access technologies of the associated base stations.

Re Claims 15, 16, 22, 70, further teaches the CORBA standard (generic command messages) which provides dynamic interfaces to various object programs (see fig.3B and col. 11, lines 58 +) wherein the object programs includes commands specific to the access technologies or protocols.

Re Claims 18, 19, 66, 67, see fig 1, wherein the telecommunication system is linked via 116 to the PSTN (PBX interface).

Re Claims 20, 68, see fig 1, wherein radio interface accommodate plurality the communication devices 110 which includes mobile, computer with wireless modem, and fixed wireless.

Re Claims 21, 69, fig 5 teaches the call processing application wherein the MSC is coupled to the HLR to identify the serial number of the communication device; fig 1 teaches the smart card which is employed in the subscriber unit 110 to provide related information and encryption keys (see col. 5, lines 33-35) which anticipates the authentication and encryption parameters retrieved by the MSC.

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Re Claims 23, 71, 79, refer to claim 21, wherein the authentication and registration is supported in the interactions between the call processing 200 and HRL; the GSM protocol provides the a paging system for the communication devices; a timer system and recovery and startup system are part of the fault management 412 of fig 4; a memory for storing information related to a particular call is a function of the HLR database.

Re Claims 24, 25, 72, 74, 75, 76-78, 80-85 MSC responsibilities includes mobility management, handoff function, trunking, billing, and call control (see col. 14, lines 56-61); wherein the handoff is a function of the received signal strength; wherein the information, i.e. customer profile is retrieved from the HLR database.

Re Claims 26, 39, 73, fig 3A teaches the OA&M layer employing the GUI between the client layer and the server layer (see col. 7, lines 58-68).

Re Claim 28, fig 7 teaches the switching module.

Re Claims 29, 31, 32, GSM supports digital interface.

Re Claims 30, 34, 35, AMPS supports analog interface and DAMPS supports digital interface.

Re Claim 33, telecommunication system of fig 1 supports North America IS-95 CDMA standard.

Re Claims 35, 36, 41- 43, 45, see fig 7, HLR and VLR.

Re Claim s 40, 44, fig 2 teaches the remote located GUI 108.

Re Claim 46, refer to Claims 1 and 2, wherein the thread refers to the objects processed in the call processor assembly 200.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8–11, 13, 14, 17, and 54-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al SIR H1,921 in view of Phillips U.S. Patent Number 6,188,898 B1.

Re Claims 8–11 and 54-58, Fletcher et al teaches in see fig 5, the call processing application 440 comprising the VLR and HLR, wherein the HLR is database containing among others service profile of the mobile user (see col. 17, lines 28-58).

Re Claims 13, 59, 60, Fletcher et al fails to explicitly teach the multi-protocol base station sending base station control messages to determine a protocol of the wireless communication device. However, Phillips teaches a multi-mode base station which is adapted to service mobile terminals having different operating protocols (see abstract & col. 3, lines 35-40). These operating protocols include GSM 900, DCS 1800, and other existing protocols (see col. 3, lines 20-29). In particular to Claims 8, 9, 61, 62, the information extracted from the initial set up call from the mobile is transmitted to the MSC through the base station and compared with the information stored in the HLR database. In particular to Claims 10, 11, 14, with the mobile registration completed, the MSC identifies the protocol (see fig 4) and determines whether access requirements

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specific to the communication unit is pertained. In particular to Claims 17, 63, 64, 65, Phillips further teaches in fig 1, the path 18 to support ATM connection (see col. 3, lines 5-10). One of ordinary skilled would have been motivated by Phillips teaching to include the multi-mode base station into the teaching of Fletcher to accommodate plurality of operating protocols stored in the HLR database to promote interoperability among different operating protocols of the communication devices. Therefore, it would have been obvious to one ordinary skilled in the art to incorporate a multi-protocol base station of Phillip into the multi-protocol MSC to interoperate within different operating protocols.

6. Claims 86-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al SIR H1,921.

Re Claims 86-104, refer to claims 1-26, Fletcher et al teaches the configuration of the telecommunication system of fig 2 is accomplished by a GUI (see Col. 6, lines 5-9). Fletcher et al fails to explicitly teach the use of the GUI to operates various components of telecommunication system which includes HLR, VLR, database management, system configuration, a call manager. The use of GUI is well known in the art. One of ordinary skilled would have motivated to implement the GUI to make easy the operation of the network. Therefore, it would have been obvious to one ordinary skilled in the art to have implemented the GUI to the various components of the MSC to provides easy operation

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 1, 27, 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Houde et al U.S. Patent Number 5,920,822.

Re Claims 1, 27, 47, Houde et al teaches in fig 4, the MSC (a switching center) coupled to TDMA and CDMA I/Fs (first and second interfaces) and the Adjunct processor which controls the operations of the Interfaces (see col. 8, lines 24+).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-5403 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Andy Lee
May 16, 2001



MELVIN MARCELO
PRIMARY EXAMINER